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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/593,836

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Matthew Eric Smith

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COWAN, LIEBOWITZ & LATMAN, P.C.
1133 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

SMALLEY, JAMES N

ART UNIT

PAPER NUMBER

3781

MAIL DATE

DELIVERY MODE

06/22/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/593,836	Applicant(s) SMITH ET AL.	
	Examiner JAMES N. SMALLEY	Art Unit 3781	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 19, 2010 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 16-18 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutt US 4,640,435 in view of Yost US 5,452,818.

Regarding claim 16, Dutt '435 teaches a lid and a pressurized container, comprising a neck (12) defining an opening, a downwardly facing annular shoulder (74), and a lid having an annular web (62), an annular skirt (56), and a continuous annular flange (10, 72).

The reference teaches all limitations substantially as claimed, but does not teach this connected by a resilient hinge.

Yost '818 teaches a closure for a pressurized beverage container, comprising an end panel which is held in sealing contact by a continuous annular flange (18) which is connected to a sidewall (16) at a hinge point (unlabeled). The reference teaches the flange forms a continuous seal (as described in column 4, lines 2-3), and it also inherently provides tension to hold the closure in place (as the closure is taught to be held "firmly in place" in column 4, lines 51-52). It is known that a longer arm, such as that of

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Yost '818, creates additional leverage through a bending moment, compared to a shorter flange, such as that already in place on Dutt '435.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lid of Dutt '435, replacing the annular flange with the continuous annular flange taught by Yost '818, motivated by the benefit of creating additional leverage through a bending moment, which ultimately results in a more firm seal.

The Supreme Court in *KSR* reaffirmed the familiar framework for determining obviousness as set forth in *Graham v. John Deere Co.* (383 U.S. 1, 148 USPQ 459 (1966)), but stated that the Federal Circuit had erred by applying the teaching- suggestion-motivation (TSM) test in an overly rigid and formalistic way. *KSR*, 550 U.S. at ___, 82 USPQ2d at 1391. Specifically, the Supreme Court stated that the Federal Circuit had erred in four ways: (1) “by holding that courts and patent examiners should look only to the problem the patentee was trying to solve ” (*Id.* at ___, 82 USPQ2d at 1397); (2) by assuming “that a person of ordinary skill attempting to solve a problem will be led only to those elements of prior art designed to solve the same problem” (*Id.*); (3) by concluding “that a patent claim cannot be proved obvious merely by showing that the combination of elements was obvious to try” (*Id.*); and (4) by overemphasizing “the risk of courts and patent examiners falling prey to hindsight bias” and as a result applying “[r]igid preventative rules that deny factfinders recourse to common sense” (*Id.*). In *KSR*, the Supreme Court particularly emphasized “the need for caution in granting a patent based on the combination of elements found in the prior art,” *Id.* at ___, 82 USPQ2d at 1395, and discussed circumstances in which a patent might be determined to be obvious. Importantly, the Supreme Court reaffirmed principles based on its precedent that “[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *Id.* at ___, 82 USPQ2d at 1395.

Furthermore, the Supreme Court issued rationales which support the conclusion of obviousness, and which can be found in the MPEP 2141(III). Under rationale (B), simple substitution of a known element for another known element to achieve predictable results is obvious.

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With the combination made, Examiner asserts that the reference will teach the claimed first, second, and third gas seals. Firstly, applying the continuous annular flange taught by Yost '818 would not destroy the reference; instead it is merely providing an equivalent snap-on structure. Secondly, Examiner notes Dutt '435 is replete with sealing references. Beginning in column 7, lines 51-63, describes a continuous seal the length of groove (64). Then, lines 63-66 describe an additional seal between edge (74) and wall (60). Thirdly, Yost '818 is specific in column 4, lines 1-3 that the flange (18) forms a seal with the beverage container. Yet further, Dutt '435 continues in column 8, lines 5-9, "Thus the bead 80 , the shoulder 70, the outwardly flared neck segment 26, and the flange 36 cooperate to lock the lid in place once it has been snapped on, thereby providing a high-quality seal." Thus, the combined prior art teaches three gas seals, and emphasizes the integrity of the seals. One having ordinary skill in the art applying the flange (18) of Yost '818 onto the closure of Dutt '435, in place of the flange (70) therein, would be motivated to ensure that Dutt '435 was not destroyed by the modification. Success could be expected because both references are clear about maintaining a high quality seal against container beverage pressure.

Regarding claim 17, the hinge of Yost '818 - - formed as the union between the flange (18), and the sidewall of Dutt '435 where it is attached - - is a hinge, because it is resilient and thin. Examiner notes column 4, lines 18-40 are explicit in discussing the varying angle of the flange before and after it is attached to a container, thus indicating rotation about this point. Because it is formed of resilient plastic, it is capable of being torn.

Regarding claim 18, the connection is a snap-connection, as it involves resilient distortion.

Regarding claim 20, the closure plate (50) is downwardly concave, and including a base portion (58) which is integral with the annular web (62).

Regarding claim 21, the outer surface of the wall of the closure plate and the inner surface of the neck comprise sealing surfaces at (26, 58).

Regarding claim 22, the sealing connection extends upwardly and outwardly.

Regarding claim 23, the closure plate includes an annular protuberance (80) and the container wall includes an annular recess (32).

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Regarding claim 24, Yost '818 teaches, in column 4, lines 18-40, deflection of the annular flange. Furthermore, Examiner notes that the flange will have to snap past container rim (36) in order to secure the lid in place.

4. Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutt US 4,640,435 in view of Yost US 5,452,818, as applied above to claims 16 and 24, and further in view of Hayes US 4,978,016.

Regarding claims 27 and 28, Dutt '435, as applied above, teaches all limitations substantially as claimed, but fails to teach the thickness of the flange increasing with distance from the hinge.

Hayes '016 teaches a tamper-evident band, including a folding flange (29) whose thickness increases with distance from the hinge. It would be apparent to one having ordinary skill in the art that this allows for better securement on the container neck, and further prevents dislodging.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the flange of Yost '818 (which has been added to Dutt '435, above), such that its thickness increases with distance from the hinge, as taught by Hayes '016, motivated by the benefit of a more secure connection which is less likely to be dislodged.

Under *KSR* rationale (B) simple substitution of a known element for another, with predictable results, is obvious.

5. Claims 19 and 25-26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dutt US 4,640,435 in view of Yost US 5,452,818, as applied above to claims 1 and 4, and further in view of Smalley US 4,501,371.

Regarding claims 19 and 25, Dutt '435, as applied above, teaches all limitations substantially as claimed, but fails to teach a rupture tab which, upon rotation, causes the seal of the container to be broken and the snap-fit connection to be released.

Smalley '371 teaches a closure and seal for a container, and furthermore teaches a rupture tab (20), the upwards rotation of which causes the cap to fracture and release the seal.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lid of Dutt '435, providing the release tab taught by Smalley '371, motivated by the benefit of providing a user means to release the seal and fracture the lid.

Furthermore, under *KSR* rationale (A) it is obvious to combine known elements in a predictable manner.

Regarding claim 26, the closure plate includes an annular protuberance (80) and the container wall includes an annular recess (32).

Response to Arguments

6. Applicant's arguments filed April 19, 2010 have been fully considered but they are not persuasive.

a) Applicant argues Dutt '435 fails to teach the claimed three gas seals.

Examiner asserts that the reference will teach the claimed first, second, and third gas seals. Firstly, applying the continuous annular flange taught by Yost '818 would not destroy the reference; instead it is merely providing an equivalent snap-on structure. Secondly, Examiner notes Dutt '435 is replete with sealing references. Beginning in column 7, lines 51-63, describes a continuous seal the length of groove (64). Then, lines 63-66 describe an additional seal between edge (74) and wall (60). Thirdly, Yost '818 is specific in column 4, lines 1-3 that the flange (18) forms a seal with the beverage container. Yet further, Dutt '435 continues in column 8, lines 5-9, "Thus the bead 80, the shoulder 70, the outwardly flared neck segment 26, and the flange 36 cooperate to lock the lid in place once it has been snapped on, thereby providing a high-quality seal." Thus, the combined prior art teaches three gas seals, and emphasizes the integrity of the seals. One having ordinary skill in the art applying the flange (18) of Yost '818 onto the closure of Dutt '435, in place of the flange (70) therein, would be motivated to ensure that Dutt '435 was not destroyed by the modification. Success could be expected because both references are clear about maintaining a high quality seal against container beverage pressure.

Moreover, Examiner asserts that such tight fitting seals described by Dutt '435 require tension, and thus deformation is likely, especially in view of the counter-argument presented below in response to Applicant's contention that Dutt '435 teaches the closure to be "thick and rigid."

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b) Applicant argues Dutt '435 is thick and rigid, citing column 6, lines 40-43.

Examiner notes the passage actually states: "The construction of the lid is such that it is **relatively rigid with respect to the can**, and this is accomplished by its shape, and by making it two to three times as thick as the can wall" (emphasis added). Examiner asserts that a can well is extremely thin, and two-to-three times this thickness is still quite thin. This is why Dutt '435 uses the term "relatively rigid" and as such, Examiner respectfully asserts Applicant has mischaracterized the quote.

c) Applicant asserts that Yost '818 fails to teach a hinge comparable to the instant resilient hinge.

Examiner notes the hinge of Yost '818 - - formed as the union between the flange (18), and the sidewall of Dutt '435 where it is attached - - is a hinge, because it is resilient and thin. Examiner notes column 4, lines 18-40 are explicit in discussing the varying angle of the flange before and after it is attached to a container, thus indicating rotation about this point. Furthermore, Examiner asserts the point is moot because the degree of rotation in the instant invention is not claimed. The term "hinge" does not have any read-in rotational range, unless such is explicitly claimed.

d) Applicant argues hindsight reasoning is used.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Furthermore, Examiner asserts that both Yost '818 and Dutt '435 are concerned with snap-on sealing closures for pressurized beverage containers, and therefore, one having ordinary skill would find them completely analogous. Applying an equivalent snap-feature of one reference to another, with predictable results, has been found to be obvious, as decided by the Supreme Court in *KSR v. Teleflex*.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES N. SMALLEY whose telephone number is (571)272-4547. The examiner can normally be reached on Monday - Friday 10 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anthony Stashick/
Supervisory Patent Examiner, Art Unit
3781

/James N Smalley/
Examiner, Art Unit 3781